

REMARKS

By this amendment, the Abstract and the Specification are amended to at least correct typographical and translational errors and to comply with the Office Action. Claim 1 has been cancelled in view of the Examiner's objection and claims 2-6 are added in order to place the claims in better compliance with accepted U.S. patent practice. Therefore, claims 2-6 are pending in this application. Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

Specification

The disclosure was objected to because of informalities. The Examiner asserts that "On Page 4, Line 5, both terms 'connection segment' and 'main body' are given the reference numeral '5'." Applicant amends the specification to correct the error and respectfully requests withdrawal of this objection.

Claim Objections

Claim 1 was objected to under 57 CFR §1.75(i) which requires each element or step of the claimed invention to be separated by a line indentation. Claim 1 was also objected to because it includes reference characters which are not enclosed within parentheses. Applicant cancels claim 1 to moot these issues and, as noted above, replaces this canceled claim with new claims which are appropriately formatted.

Claim Rejections - 35 U.S.C. §112

Claim 1 was rejected under 35 U.S.C. §112, second paragraph, as lacking antecedent basis. The Examiner asserted that “the limitations ‘the both side walls’ and ‘the opened portion’ in Line 6” have insufficient antecedent basis. As set forth above, Applicant cancels claim 1 to moot these issues.

Claim Rejections - 35 U.S.C. §103

Claim 1 was rejected under 35 U.S.C. § 103 (a) as being unpatentable over Guillaume et al. (US 6,468,078, “Guillaume”) in view of Andreiko (US 5,752,826, “Andreiko”) and Brandhorst et al. (US 6,302,690, “Brandhorst”). Applicant respectfully submits that this rejection is mooted by the cancellation of this claim.

New Claims

In this response, new claims 2-6 are presented for examination. Newly presented independent claim 2 recites a dental tray which has a molding groove formed by assembling transparent connection segments to a molding part, wherein the assembly is performed by at least one resilient locking feature. Nowhere does Guillaume disclose, teach or suggest the transparent connection segment and the locking feature cited in new claim 2.

Applicant notes that the connection segment of the conventional dental tray has a problem in drilling a hole for supporters at a precise location since the connection segments of metal are opaque which caused drilling a hole bigger or longer than necessary. Applicant also notes that the conventional dental tray for implant treatment, such as one disclosed in Guillaume, has a problem in that the connection segment is assembled by nuts and bolts or by studs and bolts,

therefore, it is inconvenient for a dentist or a orthodontist to assemble and disassemble the segments, prohibiting swift dental operation. Please refer to BACKGROUND ART of page 2 of the instant Specification.

Applicant solves these problems by a new connection segment made of a transparent synthetic resin and by a resilient locking system with an interlocking tab and opening connection features. The interlocking tabs may be installed either on a wall of the molding part or both walls of the molding part, in which case the interlocking openings are formed on either one side or both opposite sides of the connection segment, respectively. If only one interlocking tab and opening is used, a protrusion and recess structure is used on the opposite side to secure the locking. The interlocking tab can be located on either or both sides of the connection segment, in which case the interlocking opening can be formed on the wall of the molding part.

Andreiko appears to only disclose a dental tray having a single impression tray body 12 of aluminum is used. Brandhorst appears to only disclose a dental tray in which a single body mold shell of synthetic material is combined with a metal support shell. Nowhere do Andreiko and Brandhorst disclose, teach or suggest at least a transparent connection segment made of a synthetic resin as recited in claim 2. Therefore, the modification of Guillaume in view of Andreiko and Brandhorst would not render the dental tray satisfactory for drilling a hole for supporters at precise locations.

Further, Andreiko and Brandhorst fail to disclose, teach or suggest the resilient locking structure, such as the interlocking tab and opening structure combined with a protrusion and a recess, for convenient locking and unlocking of the connection segment. Therefore, the modification of Guillaume in view of Andreiko and Brandhorst would not render the dental tray satisfactory for the convenient locking and unlocking of the connection segment.

Applicant respectfully submits therefore that claim 2, and claims 3-4 that depend therefrom, are not obvious over Guillaume in view of Andreiko and Brandhorst and allowance is respectfully requested.

New independent claim 5 is similar to claim 2 except that the interlocking tabs are installed on both inner and outer walls of the molding part and the interlocking openings are formed on both opposite side of the connection segment. Accordingly, claim 5 is likewise allowable over Guillaume in view of Andreiko and Brandhorst.

New independent claim 6 is similar to claim 2 except that at least one interlocking tab is installed on one side of the connection segment while at least one interlocking opening is formed on one wall of the molding part. Accordingly, claim 6 is likewise allowable over Guillaume in view of Andreiko and Brandhorst.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that new claims 2-6 are now in condition for allowance and a notice to that effect is earnestly solicited. If any issues remain to be resolved, the Examiner is cordially invited to telephone the undersigned attorney at the number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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